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ABSTRACT

Present research on reading failure has not been able to determine whether it results from a single unitary deficit or from multiple causations. Diagnosis of reading failure is not a simple appraisal of a student's reading skills and abilities; rather, it is therapeutic in nature, always seeking to formulate more efficient means of improving reading ability. As for the type of instruction necessary, one may choose from any number of possible remedial strategies that can be used in combination or isolation to remediate word attack faults, comprehension faults, oral reading faults, and reading rate problems. To design an effective remedial reading program, one should keep in mind that remediation must (1) guarantee some degree of immediate, recognizable success; (2) teach to weakness through strengths; (3) clearly illustrate success to the student to foster motivation; (4) provide for transfer of learning to actual reading situations; (5) result in skill development; (6) provide a flexible, individual plan composed of appropriate learning activities; (7) abound in varied, high-interest, low-vocabulary materials; (8) be conducted in terms of established goals; and (9) have the cooperation of all professions. (HOD)

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TO REMEDIATE OR NOT TO REMEDIATE: THAT IS THE QUESTION!

by

Dr. Douglas Ray Reutzel

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CHAPTER I

INTRODUCTION

Despite recent findings of the National Assessment of Educational Progress (NAEP) which indicates a modest increase in the reading ability among third-graders and stable reading ability among secondary students, parents, legislators, and the public in general remain concerned about the reading ability of students attending the public schools. The media and other persons such as Paul Copperman, the author of "The Literacy Hoax," continue to harrow up the concerns of the public surrounding the reported decline of literacy levels among students of United States public schools.

Concerns over literacy levels or reading abilities of American youth are, surprisingly, nothing new. A study conducted in 1969 by the National Reading Council reported that nearly 4.3 million Americans were considered functionally illiterate. The results of this study provoked a marked reaction from the then United States Commissioner of Education, James E. Allen. Allen asserted on September 23, 1969, that reading was a fundamental right comparable to "life, liberty, and the pursuit of happiness" (Carlson, 1972). This event, along with others, triggered widespread concern over students' reading progress and gave impetus to

the establishment of many new efforts to improve students' reading abilities by either improving the teaching of reading in the first place or helping the disabled or disadvantaged reading student after the fact.

Background

Since the publication of the first American paper on remedial reading in 1916 nearly six and one-half decades ago, many events have occurred which have shaped and changed the nature of remedial reading instruction (Harris, 1968). In 1965, millions of federal dollars were made available through Titles I and III for instructing the economically disadvantaged child and for innovations in the field of reading instruction. Ensuing years brought many of these programs to a close when federal funding was discontinued under the Nixon administration. The only surviving program which continued to receive funding was the Title I program for economically disadvantaged remedial readers. Subsequently, organizations concerned with children's learning disabilities came into being. The emphasis shifted from remediation in reading to the diagnosis and remediation of learning disabilities in general. Special education began to take hold in American public school and became firmly rooted after the passage of public law 94-142, The Education for all Handicapped Children Act of 1975.

According to Harris (1977), learning disabilities teachers tended to ignore direct instruction of academic skills in favor of strengthening the "underlying psychological

abilities" of students. Examination of the results of such instructional emphasis failed to show any direct evidence supporting growth in reading (Robinson, 1972; Hammill, Goodman & Wiederholt, 1974).

Since that time, emphasis has begun to shift back toward a more skill-based, prescriptive program of remedial reading instruction (Harris, 1977). As a result of the shifting, unsuccessful instructional emphasis in reading remediation and the declining test scores of the 1970's, many persons have come to partially, if not wholly, doubt the efficacy of remedial reading programs altogether (Forell, 1976). It is of some importance that the dubious nature of remedial reading programs be restored to a respectable position. Moreover, it is necessary to restore faith in the ability of carefully-constructed, well-defined remedial reading programs and skillfully-trained instructional personnel to produce increased student reading abilities.

Statement of the Problem

First, are remedial reading programs effective; and, if so, what are the essential elements of diagnoses and remediation? Second, what would an improved remedial reading program look like based upon these essential elements of diagnosis and remediation?

Research Questions

1. Do remedial reading programs make a difference in the reading ability of students participating in such programs?

2. What are the present methods of diagnosis and suggested remedial practices based upon that type of diagnosis?

3. How might a remedial reading program be designed to improve remedial readers' success?

4. What diagnostic improvements could be implemented to increase the effectiveness of remedial reading programs?

Limitations of the Study

Because of the restricted time-frame in which this study was written, the presentation and coverage of material was by necessity somewhat selective and cursory in nature. Furthermore, additional delimitation of the concepts covered was made necessary by the broad nature of the original research questions.

Operational Definitions

Diagnosis. A set of procedures followed to identify a single causation or multiple causations of reading failure.

Reading disabilities. Those factors or causations responsible for reading failures.

Remedial Instruction. Those activities designed to

overcome sources of reading failure.

Remedial Programs. Objectives, structured activities, materials, and evaluation instruments designed to aid the student in overcoming reading failures.

Remedial Reader. One who 1) dislikes reading because of lack of interest or a poor attitude, 2) suffers from sensory-motor problems, 3) is deficient in one or more reading skill areas, 4) has a potential inconsistent with achievement level, 5) spent one or more years with a teacher who didn't know how to meet individual needs, or 6) has a measured reading achievement one year below grade level placement.

CHAPTER II

AN EXAMINATION OF DIAGNOSTIC METHODS AND REMEDIAL INSTRUCTION

The initial purpose of this study was to establish the efficacy of remedial reading instruction. Numerous studies have been conducted to assess gains made in reading from remedial instruction. Several studies have been able to demonstrate appreciable gains (Aaron, 1965; Abram & Cobb, 1980; Bond & Fay, 1950; Lovell, Byrne, & Richardson, 1963; Steirnagle, 1971). According to Spache (1976), gains from remedial instruction are about double the amount of time spent on remediation. Spache continued by enumerating several factors that affect the outcomes of remediation. Students placed in remedial reading should remain only as long as it requires to reach grade level reading ability. Remedial readers ought to be taught in groups of four to five students, three or four times a week, to make the most economical use of time in terms of post-treatment scores (Spache, 1976). Finally, Spache spoke of the fact that primary-age students make the greatest gains from remedial instruction, as well as students who are intelligent, well-adjusted and members of a middle or upper socio-economic class.

Perhaps the most disappointing facet of remedial

instruction comes to light when one examines the long-term outcomes of remediation. Generally speaking, remedial instruction does not affect school achievement over lengthy periods of time (Spache, 1976).

Adopting a medical simile, Spache (1976) defended remedial reading. Persons suffering from a cold may visit a doctor to seek relief. Medical science has yet to determine the exact cause of the cold, but some relief can be given from cold symptoms. Remedial reading teachers are much the same as the medical doctor. Remediation is a treatment for a symptom or symptoms to aid the student while struggling in school. Remediation can be preventative but not curative; however, disabled readers can find relief for the symptoms or frustrations encountered in reading through remediation. If there is justification for treating the common cold, there is ample reason to treat the remedial reader (Spache, 1976).

Causations of Reading Disability

Before embarking on a discussion of diagnostic procedures, it is necessary to present many of the correlates of reading disability that reading teachers and specialists ought to be aware of. Additionally, professional personnel should be cognizant of the theories of reading disability. Knowledge in both of these areas is prerequisite to performing optimally effective and accurate diagnosis.

There are essentially two major theories concerning reading disability. The first major theory states that

reading failure is due to a unitary deficit. Vellutino (1977) claimed reading failure is due to a linguistic deficit. Satz (1970), on the other hand, believed that remedial readers suffer from a perceptual deficit. Many find the unitary deficit theories inadequate for the task of explaining reading failure. Chall (1978) claimed a shift in attitude toward a broader list of possible causations of reading failure has occurred over the last decade. Vernon (1977) cited four sources of reading deficits: First, poor readers analyze complex visual and auditory patterns inaccurately. Second, poor readers experience difficulty linking visual and auditory (grapheme-phoneme) input. Third, poor readers demonstrate the inability to establish irregularities between phoneme-grapheme correspondences. Finally, Vernon (1977) cited poor readers' inability to group words for meaning. Such a statement seems to reflect current research thinking (Stanovich, 1980).

The question of whether or not reading failure is due to a single, unitary deficit or due to multiple causations does not appear to be near a solution. Because of the lack of a clear-cut solution, reading professionals have found it necessary to resort to the information readily available on the subject of reading failure. This is not to imply that no research has been done in the area of causations of reading disability, but that the present research is far from conclusive.

Harris and Sipay (1975) divided the causes of reading

failure into three general categories: cognitive, physical, and cultural. Using these general categories and drawing upon the works of Chall (1978); Bond and Tinker (1979); Ekwall (1977); Harris and Sipay (1975); Otto and Smith (1980); Otto, Peters, and Peters (1977); Strang (1968); and others as cited, the following Tables I, II, and III, pages 9-11, were created showing correlates of reading disability:

TABLE I

COGNITIVE CORRELATES OF READING DISABILITY

1. Intelligence
2. Psycholinguistic abilities
3. Emotional health
4. Encoding problems
5. Speech problems
6. Comprehension of syntactic structures
7. Visual memory
8. Faulty context usage
9. Faulty visual perception
10. Faulty auditory perception
11. Faulty perception of touch and motion
12. Inability to integrate modalities
13. Attention capacity
14. Conceptualization problems

TABLE I (Continued)

15. Cognitive styles
16. Attention allocation (Stanovich, 1980)

TABLE II

PHYSICAL CORRELATES OF READING DISABILITY

1. Neurological disorganization or dysfunction
2. Qualitative scanning defects (Frank & Levinson, 1976)
3. Inability to control balance and movement (D'Quirós, 1976)
4. Faulty eye movements
5. Glandular disturbances
6. Maturational lag
7. Congenital defects
8. Hyperactivity
9. Cerebral dominance
10. Brain damage
11. Pre-natal conditions
12. Prematurity
13. Directional confusion
14. Visual defects
15. Auditory defects
16. Poor physical health
17. Under-nourishment

TABLE III

CULTURAL CORRELATES OF READING DISABILITY

1. Poor teaching
2. Parental attitude
3. Need for direct teaching
4. Peer group membership
5. Lack of readiness
6. Incorrect pacing
7. Dialect differences
8. Lack of educational opportunities
9. Few curriculum alternatives
10. Administrative patterns
11. Instructional records
12. Lack of educational materials
13. Poor attitude
14. Lack of interest
15. Lack of success
16. Poor self-image

Diagnostic Procedures

Diagnosis is not a simple appraisal of a student's reading skills and abilities. Rather, diagnosis is therapeutic in nature and always seeks to formulate more efficient means of improving reading ability. From Bond, Tinker, and Wasson (1979), three types of diagnosis were identified.

General diagnosis yields information needed by classroom teachers to adjust instruction to the skill needs of groups of children. Tests of reading achievement and mental ability are typical aspects of general diagnosis. Recommended standardized reading achievement tests are the Gates-MacGinitie Reading Survey, Davis Reading Tests, and the Nelson Reading Tests. General achievement tests including tests on reading achievement are the California Reading Tests, Iowa Tests of Basic Skills, Metropolitan Achievement Tests, and the Stanford Achievement Tests. Tests recommended for assessing mental abilities are California Test of Mental Maturity, Cottell Culture Fair Intelligence Test, Lorge-Thorndike Intelligence Tests, Otis Quick-Scoring Mental Abilities Test, and Slosson Intelligence Test.

Analytical diagnosis is far more specific and systematic than general diagnosis. Once a student has been identified as having difficulties in reading, analytical diagnosis is warranted. A general area of deficiency is isolated through analytical diagnosis. Analytical diagnosis is most appropriate in cases of simple and specific cases of

retardation. Group reading tests appropriate for analytical diagnosis are the Gates Basic Reading Tests, Iowa Tests B, Silent Reading Diagnostic Tests, and the Stanford Diagnostic Reading Tests. Individually administered reading tests for analytical diagnosis are the Prescriptive Reading Inventory, Sipay Word Analysis Test, SRA Reading Record, Standard Reading Inventory, Sucher/Allred Reading Placement Inventory, WRAT, and the Woodcock Reading Mastery Tests. As a matter of course, students undergoing analytical diagnosis should receive hearing screening and vision screening. The use of an audiometer and the Keystone Telebinocular Vision Screening Test are strongly recommended.

Should analytical diagnosis reveal that a student has severe or complex reading disabilities, the next step is to case-study diagnosis. Case-study diagnosis is an in-depth, thorough, time-consuming study of an individual reader's problems. Such studies are typically very comprehensive. Case-study diagnosis is directed toward formulating the most comprehensive, appropriate individual remediation plan possible. For such a plan to be successful, many persons, both professional and non-professional, should be used. According to Chall (1978), many case studies are the result of only two professionals' involvement, the reading specialist and the school psychologist. This is simply not adequate. Every identifiable facet affecting a student's complex reading problem should be professionally investigated. Every possible line or source

of information pertinent to the student's problem should be followed up on. Steps in case-study diagnosis typically include the following: 1) a check of cumulative records, 2) a parental interview (see Appendix, page 28), 3) an individually administered mental abilities test, 4) an individually administered diagnostic reading test, 5) professional vision and hearing checks, 6) psycho-motor screenings, 7) psycho-emotional screenings, and 7) a medical examination.

Most poor readers will not need case-study diagnosis; but for those who do, case studies provide the type of thorough procedures necessary.

Remedial Instruction

In contemporary reading circles, remedial instruction has been divided into two types of instruction. For poor readers who suffer mild reading problems, a type of less intensive remedial instruction called corrective instruction is warranted. True remedial instruction is reserved for those poor readers who suffer from severe and/or organic problems.

Many questions must be answered before beginning remedial or corrective instruction. Is the reader correctly classified? What type of instruction is needed? Who can most effectively provide the necessary instruction?

If the diagnostic work has been carefully and correctly conducted, one may be safe in assuming correct placement.

As for the type of instruction necessary, this is no easy decision. Many strategies are available to the professional person for correcting or remediating reading faults. Table IV lists several possible remedial strategies for use by trained personnel.

TABLE IV

GENERAL REMEDIAL STRATEGIES

1. Directive or non-directive counseling
2. Play therapy
3. Family counseling
4. Bibliotherapy
5. Operant conditioning
6. Perceptual deficit training
7. Varied administrative patterns
8. Organizational procedures
9. Skill deficit training
10. Langunge deficit training
11. Mechanical approach
12. Modality integration

These remedial strategies should never be considered competing strategies, but rather complimentary strategies to be used in combination or isolation as circumstances

dictate. Being cognizant of the general remediation strategies is not enough to specifically remediate the numerous faults associated with reading failures. Specific strategies for specific faults are needed. Usually, specific reading faults can be classified into four main domains: word attack faults, comprehension faults, oral reading faults, and reading rate problems. The subsequent Tables V-VIII, pages 16-18, contain only selected methods for remediating reading faults in each of the afore-mentioned domains:

TABLE V

WORD ATTACK REMEDIAL TECHNIQUES

1. Sight Word Vocabulary
   a. Tell-em technique (Paradis, 1976)
   b. Circle and keep a list
   c. Practice
   d. Configuration clues
   e. VAKT (Fernald & Keller, 1921)
   f. Illustrate words
   g. Games
2. Decoding
   a. Teach high-utility phonics generalizations
   b. Teach use of context clues
   c. Teach use of reference books
   d. Teach diacritical markings

TABLE V (Continued)

e. Teach syllable generalizations
f. Teach combinations of the above
g. Make-a-code
h. Teach prefixes and suffixes (Morphemic analysis)
i. Spelling patterns
j. Sounding and blending

TABLE VI

COMPREHENSION REMEDIAL STRATEGIES

1. Establish a meaningful vocabulary
2. Use word associations
3. Use the dictionary
4. Keep vocabulary notebooks
5. Point out semantic relationships
6. Make use of context clues
7. Use punctuation when reading
8. Use cut-up cartoons for sequencing
9. Have students use recipes
10. Play games which use direction giving and taking
11. Outline
12. Study maps, diagrams, and charts
13. Teach study skills

TABLE VII

ORAL READING STRATEGIES

1. Read to peers
2. Read to younger children
3. Select interesting, low vocabulary material
4. Encourage good posture
5. Punctuate reading with musical sounds
6. Allow for practice before reading before an audience
7. Allow for self-correction
8. Model good reading
9. Choral reading
10. Memorize stories
11. Echoic reading

TABLE VIII

READING RATE REMEDIAL STRATEGIES

1. Use flash cards
2. Use a tachistiscope
3. Use controlled readers
4. Use an index card
5. Use tracing activities for eye-movement training
6. Encourage flexibility
7. Provide rewards
8. Teach skimming and scanning

Many other techniques could have been recommended but were deemed unnecessary for present purposes. Nonetheless, Ekwall (1977) and the Bloomington Area Reading Council provide excellent further sources of specific techniques for remediating reading difficulties.

In conclusion, remedial reading programs have been shown to produce reading gains of up to double the amount of time spent in remediation, although retention of such gains over long periods of time is doubtful. Despite these facts, remediation of reading difficulties continues to be in demand for those who suffer from the symptoms of poor reading. Realizing the limitations of reading remediation, reading professionals have an obligation, indeed a duty, not to build unreasonable expectations in their clientele and to remain current on issues of reading disability, diagnosis, and remediation.

CHAPTER III

RECOMMENDATIONS AND CONCLUSIONS

Three purposes were undertaken by the present study: first, to establish a need for and the efficacy of remedial reading programs; second, to examine contemporary diagnostic methods and remedial instructional techniques; and third, to make suggestions on improving remedial reading diagnosis and instructional design.

Recommended Improvements in Reading Diagnosis

First, the teacher is the single most influential variable in the diagnosis and remediation process. Jansky (1972) commented:

> In classes taught by adequate teachers (as rated by principals), 23 percent of the children failed. When teachers were characterized as poor, the failure rate rose to 49 percent. Teacher competence seemed to make more difference for the weaker group--the white boys, the black children, and the Puerto Ricans--than for white girls (Jansky et. al., 1972, p. 83).

Acknowledging that teacher competence is of some importance, the guidelines for preparing reading clinicians published by the International Reading Association in 1968 are

submitted to the reader as a recommendation to improve the quality of both reading diagnosis and instruction. The preparation requirements are as follows: 1) an advanced course or courses in the diagnosis and remediation of reading and learning problems, 2) a course or courses in individual testing, 3) an advanced clinical or laboratory practicum in the diagnosis and remediation of reading difficulties, and 4) field experiences under the direction of a qualified reading clinician (Smith et. al., 1978, pp. 214-219).

Professionals also need to be able to detect reading problems earlier or develop methods which will accurately predict reading failure in very young children. Harris (1977) spoke of the need for early intervention with children in which future reading disabilities may later come to light. More pressure, according to Harris (1977), is mounting for research supporting widespread application of early screening procedures. As a second recommendation to improve reading diagnosis, early intervention research and application is urged.

A final recommendation to improve diagnosis is team involvement. Regarding this recommendation, Chall (1978) stated:

> . . . a thorough diagnosis would involve many professionals (pediatrician, opthamologist, speech and hearing specialists, psychiatrists) . . . (p. 32).

This recommendation is based on personal experience and another statement by Chall (1978):

> In most instances, remedial reading instruction . . . diagnosis and treatment were performed by a reading specialist and/or a clinical-school psychologist . . . (pp. 31-32).

Recommended Improvements in Remedial Reading Instruction

Research supports two recommendations to improve remedial reading instruction. First, have children memorize stories by "bawling in concert" as Huey (1908, p. 274) reported children did in the Orient. Support for Huey's (1908) recommendation came from work done on this method at Harvard University by Chomsky (1978). Second, teach poor readers direct reading skills. Chall (1978) cited several recent studies which support this recommendation.

Conclusions

As a means of describing the major facets of an improved remedial reading program design and as a means of concluding this study, the following general principles of remedial reading instruction are recommended: 1) Remediation must guarantee some degree of immediate, recognizable success, 2) Teach to weakness through strengths, 3) Successes must be clearly illustrated to the student to foster motivation, 4) Remediation must, as far as possible, provide for transfer of learning to actual reading situations, 5) Remediation should result in skill development, 6) Remediation should

provide a flexible, individual plan composed of appropriate learning activities, 7) Remedial programs should abound in varied, high-interest, low-vocabulary materials, 8) Remediation should be conducted in terms of established goals, and 9) Remediation requires cooperation of all professionals, parents, and administrators.

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APPENDIX

Guide for Parental Interview

The following information can be given by parents and brought to you or it can serve as a guide for a parental interview where you ask the questions and you record the answers.

Student Information Blank

I. General Information

Student's name_____
Sex_____ Age_____Birthdate_____Grade_____

Parent's name_____

Home address_____
Father's occupation_____

School_____

Principal_____Teacher_____

Brothers and/or Sisters

Name	Age	Grade

What other medical, social, or educational personnel, besides regular school activities, have worked with the child? (Give name, address, and specialty.)

1._____

2._____

3._____

Do we have your permission to contact these agencies for information that may help us with your child?

_____YES _____NO

II. Specific Problem Data

Describe briefly the child's difficulty (or difficulties)

When did you first become aware of this difficulty?

_____

Who called the difficulty to your attention?_____

Has dififculty shown improvement in the last two years?

_____

Does any other family member have this difficulty?_____

Can you think of anything that might explain this difficulty? Explain.

III. Health Information

Was there any unusual birth condition? _____If so, explain.

Date of most recent eye examination_____ by _____ Results?_____Glasses prescribed?_____

Hearing difficulty_____Described:_____

General Health (excellent, good, fair, poor, etc.)

Describe unusual conditions:

Has the student had a long illness?_____What?_____

Length?_____

Has the child had a high fever?_____When?_____

Has he had serious injury?_____coordination problem?_____ Describe.

His handedness changed?_____major operations_____

For what_____Extended absence from school?_____

In which grades did he miss most?_____

Is the child energetic?_____listless?_____

Presently on medication_____for what?_____

Does he eat well?_____sleep well?_____

What age did he first walk?_____Talk?_____

IV. School Information

Did the child attend a kindergarten or preschool?_____

Age entering first grade?_____Attitude toward 1st grade:

What school activities does the child enjoy best?

Least?

In which subject does the child do his best work?

Describe any unusual school events that happened to the child at school.

Has the child received any special school help for his learning difficulty?

How long?_____

Name of school specialist with whom he worked_____

V. General Adjustment

How would you describe your child? Happy____Worried____

Aggressive_____At ease with adults_____

Had many friends_____

What are his favorite activities?_____

What does he like to do best?_____